WHAT IS CLAIMED IS:

1. A connector comprising:

a terminal metal fitting including a supporting portion and an elastic contact portion located apart therefrom within a cavity, a complementary conductor being located on the surface of said supporting portion, the complementary conductor being sandwiched between said supporting portion and said elastic contact portion under an elastic restoring force urging said complementary conductor toward said supporting portion; and

a connector housing which houses said terminal metal fitting and is coupled with a complementary insulator supporting said complementary conductor, wherein

a gap is formed between said elastic contact portion and inner face of said cavity, and assuming that the gap is A, a temperature change acting on said complementary conductor and insulator and said elastic contact portion is ΔT, a linear expansion coefficient of a union consisting of said complementary conductor and complementary insulator is βa, a distance between a first fixing portion where said complementary conductor is fixed and a contact between said complementary conductor and said elastic contact portion is la, a linear expansion coefficient of a union consisting of said connector housing and said terminal metal fitting is βb, and a distance between a second fixing portion where the said terminal metal fitting is fixed and said contact is lb,

$A \geq = \Delta T \times \beta a \times 1a - \Delta T \times \beta b \times 1b$,

and assuming that the elastic coefficient of said elastic contact is k, the static friction between said complementary conductor and said elastic contact portion is μ and the elastic restoring force of said elastic contact portion is F,

$$\Delta T \times \beta a \times 1a - \Delta T \times \beta b \times 1b \leq 2 \times (\mu \times F/k).$$

2. A connector according to Claim 1, wherein said conductor is inserted between said supporting member and said contact portion in a one direction and sandwiched therebetween, and said gap A in a first direction orthogonal to both said one direction and said elastic restoring force and in a second direction orthogonal to said one direction and along said elastic restoring force is expressed by

$A \geq = \Delta T \times \beta a \times 1a - \Delta T \times \beta b \times 1b$, and

said elastic coefficient k in the respective one direction, said first direction and said second direction is expressed by

$$\Delta T \times \beta a \times 1a - \Delta T \times \beta b \times 1b \leq 2 \times (\mu \times F/k).$$

3. A connector according to Claim 2, wherein

said complementary conductor, said complementary insulator and said electric wire connected to said complementary conductor constitute a complementary member, and assuming that the acceleration which acts on said complementary member along said second direction is a1 and the mass of said complementary member is m,

the elastic restoring force F of said elastic contact

portion is expressed by

$$F > m \times a1.$$

4. A connector according to Claim 2, wherein said said complementary conductor, said complementary insulator and said electric wire connected to said complementary conductor constitute a complementary member, and assuming that the acceleration which acts on said complementary member along a direction orthogonal to said second direction is a1 and the mass of said complementary member is m,

the elastic restoring force F of said elastic contact portion is expressed by

$$F > m \times a2/\mu.$$

5. A connector according to Claim 3, wherein said said complementary conductor, said complementary insulator and said electric wire connected to said complementary conductor constitute a complementary member, and assuming that the acceleration which acts on said complementary member along a direction orthogonal to said second direction is a1 and the mass of said complementary member is m,

the elastic restoring force F of said elastic contact portion is expressed by

$$F > m \times a2/\mu.$$